No. 8300038

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Wilbur-Ellis Company
Seed Division

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT TY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IT UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS Y THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Snowball'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 31st day of August in the year of our Lord one thousand nine hundred and eighty-four.

Attest:

Kenneth A. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

John R. Block
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

FORM APPROVED: OMB NO.0581-0055

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1. NAME OF APPLICANT(S)
Wilbur - Ellis Company
Seed Division

2. TEMPORARY DESIGNATION
PVD 895

3. VARIETY NAME
SNOWBALL

4. ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*
East 12001 Empire Way
Spokane, Washington 99206 USA

5. PHONE *(Include area code)*
(509)922-1774

FOR OFFICIAL USE ONLY

PVPO NUMBER
8300038

6. GENUS AND SPECIES NAME
Phaseolus vulgaris

7. FAMILY NAME *(Botanical)*
Leguminosae

FILING
DATE 1/12/83
TIME 2:30 ☐ A.M. ☐ P.M.

8. KIND NAME
Dry Bean

9. DATE OF DETERMINATION
January 20, 1982

FEES RECEIVED
AMOUNT FOR FILING
$ 1,000
DATE 1/12/83
AMOUNT FOR CERTIFICATE
$ 500.00
DATE 5/21/84

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)*
CORPORATION

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
California

12. DATE OF INCORPORATION
1924

13. NAME AND ADDRESS OF APPLICANT REPRESENATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
Floyd A. Weems - Research Director
Wilbur - Ellis Company - Seed Division
East 12001 Empire Way
Spokane, Washington 99206 USA

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

a. ☒ Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*

b. ☒ Exhibit B, Novelty Statement

c. ☒ Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*

d. ☐ Exhibit D, Additional Description of the Variety

per revised Copy rec'd 5-13-84 CKBrowne

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act.)*
☒ Yes *(If "Yes," answer items 16 and 17 below)* ☒ No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☒ Yes ☐ No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ Foundation ☒ Registered ☒ Certified

18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COUNTRIES?
☐ Yes *(If "Yes," give names of countries and dates)*
☒ No

19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OR OTHER COUNTRIES?
☐ Yes *(If "Yes," give names of countries and dates)*
☒ No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT
Floyd A. Weems
Floyd A. Weems - Research Director
Wilbur - Ellis Company
Seed Division
DATE November 20, 1982

SIGNATURE OF APPLICANT
DATE

FORM LMGS-470 (9-81) (Edition of 1-78 is obsolete)

NOTE: THERE HAS BEEN A CHANGE IN THE FEES.

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and $1,000 fee ($500 filing fee and $500 examination fee) to U.S. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, Grain, and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. [See section 180.175 of the Regulations and Rules of Practice (as amended November 8, 1982).] Retrain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

Item

9 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.

14a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

14b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

14d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.

15 If "Yes" is specified *(seed of this variety be sold by variety name only as a class of certified seed)* the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. *(See section 180.16 of the Regulations and Rules of Practice.)*

16 See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

13 A EXHIBIT A

(GREAT NORTHERN 1140 x DB 620341) X BULGARIAN WHITE) X^3 DB 620341

GREAT NORTHERN 1140 is a commercial variety widely grown in dry bean production areas of the USA and Western Canada.

DB 620341 is a selection from PI 282096, used as a breeding line. Plants have a semi-erect bush, occasional runner, very straight, large diameter pods that are round to slightly oval. Seeds are very large in diameter, shiney white and almost spherical. Pods have 4-5 very slightly wrinkled seeds. Pods mature in 95-100 days. Plants have very extensive root sturctures on both vertical and lateral planes. Plants exhibit significant tolerance to Fusarium solani and resistance to Bean Common Mosaic Virus (BCMV) BV1 and NY 15 strains and resistance to Curly Top.

BULGARIAN WHITE is a very large, white seeded breeding line obtained from the Plant Breeding Department of the University of Nebraska. The plant type is rather vigorous, semi-bush with large light colored pods that produce 3-5 seeds per pod. Plants are resistant to Bean Common Mosiac Virus (BCMV) BV1 and NY15. It has only tolerance to Fusarium solani.

GREAT NORTHERN 1140 was crossed with DB 620341. Plants of the F_1 were then crossed with Bulgarian White and advanced three generations, then back crossed to DB 620341. The resulting progeny was advanced to the F_5 generation, where single plant selections began for seed color, quality, size, number of pod, insect tolerance, disease reaction and production potential. The most promising progenies of this group were advanced to the F_7 generation where they were found to be stable genetically. A rapid increase program was then initiated on the most superior performing individual PVD 895 for seed quantities of Snowball which we now possess.

As of this date, we have not observed variants in single plant selection PVD 895, variety, SNOWBALL.

8300038

SNOWBALL

13 B EXHIBIT B

Wilbur-Ellis Company, Seed Division believes we are the original and only breeder of Snowball and base novelty on the following; SNOWBALL is most similar to the "pea bean" (Navy) variety, Seafarer.

Plants of SNOWBALL in Exhibit "C" are type 3 - "wide bush form", whereas Seafarer is type 4 - "high bush form".

Plants of SNOWBALL are very vigorous, wirey and average 50.3 centimeters in height, whereas Seafarer averages 36.3 centimeters with average to moderate vigor and petite plant structures.

Foliage of SNOWBALL is very vigorous, large leaves, tendency for semi-runners (20 centimeters), no racemes, whereas Seafarer is moderately vigorous, no runners, but upright racemes.

Plants of SNOWBALL are semi-compact near center with 'pod-set' concentrated in that area, under the leaf canopy, whereas Seafarer is semi-open, with 'pod-set' throughout the plant, including the vertical racemes.

Pods of SNOWBALL are large, tough, semi-rough, constricted between ovules, heart-shaped and 10.16 centimeters long, whereas Seafarer is smooth, 'near' round and 6.9 centimeters in length and moderately fragile.

Seeds of SNOWBALL (hilum view) are pure white, round with frequent seed coat wrinkles and slightly oval in cross-section, whereas Seafarer is also pure white, very round, very smooth seed coat and round in cross-section.

Seeds of SNOWBALL are large, 57.0 - 60.0 grams per 100 seeds, whereas Seafarer is 20.5 - 22.5 grams per 100 seeds.

SNOWBALL is resistant to Curly Top Virus, whereas Seafarer is susceptible.

SNOWBALL maturity averages 102 days, whereas Seafarer averages 95 days.

SNOWBALL is a large, pea shaped 'specialty market' type developed for ethnic areas of the world, whereas Seafarer is a small pea bean (Navy) developed for USA package and processing trades.

FORM APPROVED: OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Bean)

OBJECTIVE DESCRIPTION OF VARIETY
BEAN (Phaseolus vulgaris L.)

NAME OF APPLICANT(S)
Wilbur - Ellis Company Seed Division

ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*
East 12001 Empire Way
Spokane, Washington 99206 USA

FOR OFFICIAL USE ONLY

PVPO NUMBER
8300038

VARIETY NAME OR TEMPORARY DESIGNATION
PVD 895 SNOWBALL

Place numbers in the boxes (e.g. [0][8][9]) for the characters that best describe this variety. Measured data should be for SPACED PLANTS. Ranges may also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____. The location of test area is _____. Please answer questions appropriate for your variety if the information is available.

1. TYPE:

[X] 1 = Field *(dry-edible)* 2 = Garden

2. MARKET MATURITY:

[N][A] Days to edible pods

[N][A] Days to green shells

[1][0][0]-[1][0][5] Days to dry seeds

[ ][N][A][ ] Heat units to edible pods

[ ][N][A][ ] Heat units to green shells

[ ][N][A][ ] Heat units to dry seeds

[N][A] No. days earlier than ..... [NA]

..... Same as .. [NA]

[0][5]-[1][0] No. days later than ..... [09]

1 = Tendercrop
2 = Kentucky Wonder
3 = Kinghorn Wax
4 = White Kidney
5 = Michelite 62
6 = Dwarf Horticultural
7 = Bush Blue Lake 290
8 = Other (specify below)
9= Seafarer
10= Royal Reds
11= Emerson

3. PLANT:

[x] 1 = Determinate 2 = Indeterminate

[5][0].[3] cm height

[0][5] cm shorter than ..... [10]

Same as .. [NA]

comparison variety from above

[1][4] cm taller than ..... [09]

[4][5].[7] cm spread

[2]-[3] Number primary branches near base

[N][A] cm narrower than ..... [NA]

width same as ... [11]

comparison variety from above

[2] Branching habit: 1 = compact 2 = open

[5].[7] cm wider than ..... [09]

[2] Main stalk: 1 = brittle 2 = wirey

[1] 1 = stout 2 = thin

3. PLANT: (Cont'd)

[3] Pod position: 1 = low 2 = high 3 = scattered

[3] Bush form (illustrated below):

1 = spherical bush form 2 = stem bush form 3 = wide bush form 4 = high bush form

5 = other (specify) _____

4. LEAVES:

[1] 1 = smooth 2 = wrinkled

[2] 1 = dull 2 = glossy

[4] Size: 1 = small (Earliwax) 2 = medium 3 = large (Tendercrop) 4= Emerson

[3] Color: 1 = light green (as light or lighter than Bountiful) 2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)

5. FLOWERS:

[1] Color: 1 = white 2 = cream 3 = pink 4 = lilac 5 = purple 6 = Other (specify)_____

50 - [52] Days to 50% bloom

6. FRESH PODS: (Edible maturity, average for 20 pods)

[2] Exterior color: 1 = light green (as light or lighter than Bountiful)
2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)
4 = light yellow (Brittlewax)
5 = golden yellow (Cherokee Wax)
6 = green-red variagated (Horticultural)
7 = other (specify)

_____

% Sieve size distribution at optimum maturity for non-flat pods

Note:
1 = 4.76 mm to 5.76 mm
2 = 5.76 mm to 7.34 mm
3 = 7.34 mm to 8.34 mm
4 = 8.34 mm to 9.53 mm
5 = 9.53 mm to 10.72 mm
6 = 10.72 mm or larger

1	2	3	4	5	6
NA	NA	NA	NA	NA	NA

3 sieve	[NA] cm length	[NA] mm width		[NA] mm thickness	
4 sieve	[NA] cm length	[NA] mm width		[NA] mm thickness	
5 sieve	[NA] cm length	[NA] mm width		[NA] mm thickness	
6 sieve	[NA] cm length	[NA] mm width		[NA] mm thickness	

6. FRESH PODS: (Cont'd)

[4] Cross section pod shape: 1 = flat 2 = oval 3 = round 4 = heart

[1] Creaseback: 1 = present 2 = absent

[1] Pubescence: 1 = none 2 = sparse 3 = considerable

[2] Spur: 1 = straight 2 = slightly curved 3 = curved

[2] Constrictions: 1 = none 2 = slight 3 = deep

[2] Pod flesh: 1 = light 2 = medium 3 = dark

[0 5] mm spur length

[3] Fiber: 1 = none 2 = sparse 3 = considerable

[4-5] Number of seeds per pod

[1] Surface: 1 = smooth 2 = rough

[1] Suture string: 1 = present 2 = absent

[NA] Seed development (Snap Bean): 1 = slow 2 = medium 3 = fast

[NA] Machine harvest: 1 = adapted 2 = not adapted

[NA] Pod flavor:
(1) Standard (Tendercrop)
(2) Mild Blue Lake (BBL 274)
(3) Strong Blue Lake (Pole FM1)
(4) Mild Romano (Roma)
(5) Strong Romano (Pole Romano)
(6) Other (specify) _____

7. SEED COAT COLOR:

[1] 1 = Monochrome 2 = Polychrome [1] 1 = shiny 2 - dull

[1] Primary color: } 1 = white 2 = yellow 3 = buff 4 = tan

[NA] Secondary color: } 5 = brown 6 = pink 7 = red 8 = purple
9 = blue 10 = black 11 = other (specify) _____

[1] Color Pattern: 1 = none 2 = splashed 3 = mottled 4 = striped 5 = flecked 6 = dotted

[NA] Secondary color location: 1 = hilar ring 2 = ventral surface
3 = sides 4 = dorsal surface
5 = not restricted to any area 6 = combination of location (specify below)

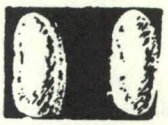
_____

[NA] Hilar ring on colored seeds: 1 = absent 2 = narrow 3 = butterfly shaped

8. SEED SHAPE AND SIZE:

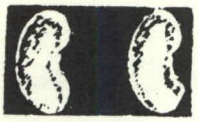
[1] Hilum view: 1 = elliptical 2 = oval 3 = round [2] Cross section: 1 = elliptical 2 = oval 3 = cordate 4 = round

[2] Side view:



1 = oval to oblong

2 = round



3 = reniform

8. SEED SHAPE AND SIZE: (Cont'd) *(See addendum rec'd 5/13/83) "Update" CMB

[2] 1 = truncate ends 2 = rounded ends

[58.7] gm/100 seed

[NA] gm/100 seed lighter than ..... [NA]

gm/100 seed same as .... [NA] } comparison variety from page one

* [11.9] gm/100 seed heavier than ..... [10]

9. ANTHOCYANIN: (1 = absent 2 = present)

[1] Flowers [1] Stems [1] Pods [1] Seeds [1] Leaves

10. DISEASE RESISTANCE (0 = not tested 1 = susceptible 2 = resistant): 3= Unknown

[x] Anthracnose (specify race below) _____

[x] Rust (specify race below) _____

[x] Powdery mildew

[2] Fusarium root rot

[2] Pythium root rot

[3] Rhizoctonia root rot

[3] Pythium wilt

[3] Angular leaf spot

[3] Bacterial wilt

[3] Halo blight (specify race below) _____

[3] Fuscous blight

[3] Red node virus

[3] Pod mottle virus

[2] Bean common mosaic virus (specify strain below) BV1, NY 15, Western

[3] Mosaic mottle

[3] Black root

[2] Bean yellow mosaic virus

[2] Curly top

[ ] Other (specify below) _____

11. INSECT RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant) 3= Unknown

[3] Aphids

[2] Leaf hopper

[1] Lygus

[3] Pod borer

[3] Root knot nematode

[3] Seed corn maggot

[3] Thrips

[3] Weavils

[1] Other (specify below) Two spotted mites

12. PHYSIOLOGICAL RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

[2] Heat [3] Cold [2] Drought [3] Air pollution

13. COMMENTS:

8300038

8. SEED SHAPE AND SIZE: (Cont'd)

[2] 1 = truncate ends 2 = rounded ends

Update to Exhibit C. rec'd 5-13-83

[58.7] gm/100 seed

[NA] gm/100 seed lighter than ..... [NA]

gm/100 seed same as .... [NA] } comparison variety from page one

[11.9] gm/100 seed heavier than ..... [10]

37.0 gm/100 seeds heavier than # 9

9. ANTHOCYANIN: (1 = absent 2 = present)

[1] Flowers [1] Stems [1] Pods [1] Seeds [1] Leaves

10. DISEASE RESISTANCE (0 = not tested 1 = susceptible 2 = resistant): 3= Unknown

- [x] Anthracnose (specify race below) _____
- [x] Rust (specify race below) _____
- [x] Powdery mildew
- [2] Fusarium root rot
- [2] Pythium root rot
- [3] Rhizoctonia root rot
- [3] Pythium wilt
- [3] Angular leaf spot
- [3] Bacterial wilt
- [3] Halo blight (specify race below) _____
- [3] Fuscous blight
- [3] Red node virus
- [3] Pod mottle virus
- [2] Bean common mosaic virus (specify strain below) BV1, NY 15, Western
- [3] Mosaic mottle
- [3] Black root
- [2] Bean yellow mosaic virus
- [2] Curly top
- [ ] Other (specify below) _____

11. INSECT RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant) 3= Unknown

- [3] Aphids
- [2] Leaf hopper
- [1] Lygus
- [3] Pod borer
- [3] Root knot nematode
- [3] Seed corn maggot
- [3] Thrips
- [3] Weavils
- [1] Other (specify below) Two spotted mites

12. PHYSIOLOGICAL RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

[2] Heat [3] Cold [2] Drought [3] Air pollution

13. COMMENTS:


RECEIVED
MAY 13 1983